

REMARKS

In response to the above-identified Office Action (“Action”), Applicant amends the application and seeks reconsideration thereof. In this response, claims 3, 4 and 19 have been amended, no claims have been added and no claims have been cancelled. Accordingly, claims 3-10 and 14-32 are pending.

The instant invention is directed to a method of making a lithium secondary battery comprising forming a positive electrode by coating a lithium metal oxide on a current collector, forming a negative electrode by coating carbonaceous materials or SnO₂ on a negative current collector, interposing a separator between the positive and negative electrodes and injecting an electrolyte to immerse the positive electrode and negative electrodes and the separator.

I. Examiner Interview Summary

Applicant respectfully submits herewith a Summary of the Examiner Interview conducted on May 31, 2006 via telephone in connection with the outstanding Action. During the Interview, the Examiner and Applicant’s attorney discussed amendments to the independent claims and in particular the deletion of the recitation of “lead” and “silver” from the claims. No agreements were reached during the Interview.

II. Amendments to the Claims

In the attached Amendments to the Claims, claims 3, 4 and 19 have been amended to delete “lead” and “silver” from the claims. The attached amendments are supported by the specification and do not add new matter. In view of the foregoing, Applicant respectfully requests consideration and entry of the attached Amendments to the Claims.

III. Claim Objections

In the outstanding Action, the Examiner objects to claims 4 and 19 for incorrectly reciting “copper and silver” and requests correction. The recitation of silver has been deleted from these claims in the attached amendments therefore the objection is moot.

IV. Claims Rejected Under 35 U.S.C. §112, first paragraph

In the outstanding Action, the Examiner rejects claims 5, 15-18, 20 and 27 on the basis they fail to comply with the written description requirement. In particular the Examiner alleges the specification does not provide support for the specific copper alloy containing boron or cobalt and at least two other metals and thus it does not appear Applicant has possession of the claimed invention. The Examiner further alleges the claims lack enablement. Applicant respectfully traverses the rejection for at least the following reasons.

The standard for determining whether the written description requirement is met is whether “the description clearly allow persons of ordinary skill in the art to recognize that he or she invented what is claimed.” See MPEP 2163.02. Moreover, the test for enablement is “whether one reasonably skilled in the art could make or use the invention from the disclosures in the patent coupled with information known in the art without undue experimentation.” *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Applicant respectfully submits each of the alloy materials of claims 5, 15-18, 20 and 27, including boron and cobalt, are disclosed in Applicant’s specification. See, for example, Application, pages 2-3. In addition, original claim 1 and the specification disclose that the cu-alloy foil may include at least one material selected from the list of materials recited in the claims. See Application, page 2, line 6 – page 3, line 16. As the Examiner is no doubt aware, the language “at least one” allows for the selection of more than one material, such as three, four or six as is recited in the rejected claims. Moreover, the specific groups of materials including copper, nickel, titanium, magnesium and/or manganese recited in claims 15-18 are further disclosed in Table 1, on page 5 of the Application. Applicant respectfully submits, in view of the above identified disclosures, one of ordinary skill in the art would recognize that Applicant invented that which is claimed. Moreover, Applicant believes the level of skill in the art is high therefore undue experimentation would not be required for one of ordinary skill in the art to make or use the invention. In view of the foregoing, Applicant respectfully submits claims 5, 15-18, 20 and 27 are in compliance with 35 U.S.C. §112, first paragraph. In view of the foregoing, Applicant respectfully requests withdrawal of the rejection of claims 5, 15-18, 20 and 27 on this basis.

V. **Claims Rejected Under 35 U.S.C. § 102(a)/103(a)**

Claims 3, 4, 6, 19, 21 and 32 are rejected under 35 U.S.C. § 102(a)/103(a) as being anticipated by, and alternatively unpatentable over, JP 11-339811 to Takagi (“Takagi ‘811”). Applicant respectfully traverses the rejection for at least the following reasons.

Applicant asserts that Applicant’s claimed invention benefits from the acknowledged priority date of January 25, 1999 based on KR 1999-2257, which predates Takagi ‘811 (December 10, 1999). Note that Applicant’s other priority document asserts lead and silver, which were not asserted in the earlier priority date based on KR 1999-2257. Applicant has therefore amended the claims to remove the limitation of “silver” and “lead” from the claims.

In addition, KR 1999-2257 supports the additional limitations in claims 3 and 32 directed to a copper-based material selected from the group consisting of copper, copper/nickel, copper/titanium, and copper/nickel/titanium. This is evidenced by the fact that these groupings were first presented in claims 1-3 in the Response dated September 13, 2001. The Examiner rejected these claims in a subsequent Office Action dated January 3, 2002 for lack of enablement under 35 U.S.C. 112. In subsequent responses Applicant traversed the rejection and directed the Examiner’s attention to Table 1 of the instant application (also found in KR 1999-2257) in which the specific groupings are disclosed. Ultimately, the rejections to the claims on this basis were withdrawn. In view of the Examiner’s actions, it appears the Examiner found the specific groupings recited in claims 3 and 32 were supported by Applicant’s specification and in particular Table 1. Moreover, the Examiner previously rejected claim 32 in view of JP 11-98671 in an Office Action dated April 14, 2004. In response, Applicant deleted lead and silver from claim 32 and pointed out to the Examiner that JP 11-98671 is not a proper reference because the instant application is entitled to the priority date of KR 1999-2257 which predates JP 11-98671. In view of these arguments, the Examiner withdrew JP 11-98671 as a reference in an Office Action dated November 30, 2004. Accordingly, in view of the Examiner’s actions to date these additional limitations are supported by KR 1999-2257. In view of the foregoing, Applicant respectfully submits that Takagi ‘811 is not a valid reference under 35 U.S.C. § 102(a)/103(a).

Moreover, even if Takagi '811 was valid prior art, Takagi '811 teaches rolled copper foils made by cold rolling are preferred in order to achieve a desired tensile strength. See Takagi '811, paragraph [0010]; Table 1. Thus, Takagi '811 fails to teach or suggest at least the element of “wherein the copper-based alloy is produced by a plating process into a foil shape” as recited in claims 3, 4, 19 and 32 in order to improve tensile strength.

Thus, for at least the foregoing reasons, Takagi '811 may not be relied upon to teach or suggest each and every element of independent claims 3, 4, 19 and 32 and dependent claims 6 and 21. Since each element of claims 3, 4, 6, 19, 21 and 32 are not taught or suggested by Takagi '811, anticipation or alternatively, a *prima facie* case of obviousness, may not be established. For at least the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 3, 4, 6, 19, 21 and 32 under 35 U.S.C. §102(a)/103(a).

VI. Claims Rejected Under 35 U.S.C. § 103(a)

Claims 3-7, 19-22 and 26-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over, JP 11-086871 to Takagi (“Takagi '871”). Applicant respectfully traverses the rejection for at least the following reasons.

Applicant asserts that Applicant’s claimed invention benefits from the acknowledged priority date of January 25, 1999 based on KR 1999-2257, which predates Takagi '871 (March 30, 1999). Note that Applicant’s other priority document asserts lead and silver, which were not asserted in the earlier priority date based on KR 199-2257. Applicant has therefore amended the claims to remove the limitation of “silver” and “lead” from the claims. In view of the foregoing, Applicant respectfully submits that Takagi '871 is not a valid reference under 35 U.S.C. § 103(a).

Moreover even if Takagi '871 was valid prior art, similar to Takagi '811, Takagi '871 teaches rolled copper foils made by cold rolling are preferred. See Takagi '871, paragraph [0009]. Thus, Takagi '871 fails to teach or suggest “wherein the copper-based alloy is produced by a plating process into a foil shape” as recited in claims 3, 4, 19 and 32 in order to improve tensile strength. Thus, for at least the foregoing reasons, Takagi '871 may not be relied upon to teach or suggest each and every element of claims 3, 4, 19, 26 and 32. Since each element of

claims 3, 4, 19, 26 and 32 are not taught or suggested by Takagi '871, a *prima facie* case of obviousness may not be established. For at least the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 3, 4, 19, 26 and 32 under 35 U.S.C. 103(a).

In regard to claims 5-7, 20-22 and 25-31, claims 5-7 depend from claim 4, claims 20-22 and 25 depend from claim 19 and claims 27-31 depend from claim 26 and incorporate the limitations thereof. Thus, for at least the foregoing reasons discussed in regard to claims 4, 19 and 26, Takagi '871 may not be relied upon to teach or suggest each and every element of claims 5-7, 20-22 and 25-31. Since each element of claims 5-7, 20-22 and 25-31 are not taught or suggested by Takagi '871, a *prima facie* case of obviousness may not be established. For at least the foregoing reasons, Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 5-7, 20-22 and 25-31 under 35 U.S.C. 103(a).

CONCLUSION

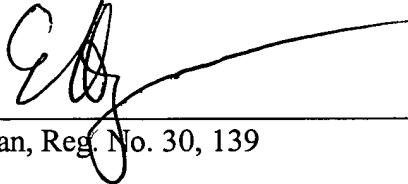
In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes that a telephone conference would be useful in moving the application forward to allowance, the Examiner is encouraged to contact the undersigned at (310) 207-3800.

PETITION FOR EXTENSION OF TIME

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on February 23, 2006, Applicant respectfully petitions the Commissioner for a one (1) month extension of time, extending the period for response to June 23, 2006. The Commissioner is hereby authorized to charge payment to Deposit Account No. 02-2666 in the amount of \$120.00 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(2) large entity. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

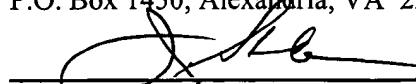

Eric S. Hyman, Reg. No. 30, 139

Dated: June 13, 2006

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CERTIFICATE OF MAILING:

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 13, 2006.


Jean Svoboda